REMARKS

Claims 1-10, 21-30 and 52-57 are now pending in the present application. Claims 11-20 and 30-51 have been cancelled. Claims 2-10 and 22-30 have been amended. Claims 52-57 are new. Basis for the amendments and new claims can be found throughout the specification, claims and drawings originally filed. The amendments to the claims contained herein are of equivalent scope as originally filed and, thus, they are not narrowing amendments. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

CLAIM OBJECTIONS

The Examiner objected to Claims 2-10 and 22-30 because of incorrect capitalization of the word "claim". Applicant has accordingly amended Claims 2-10 and 22-30 to replace "Claim" with "claim". Applicant believes this objection is now moot.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-4, 8-10, 21-24, and 28-30 stand rejected under 35 U.S.C. § 102(e) as being anticipated by LeBlanc et al. (U.S. Pat. No. 6,236,365). This rejection is respectfully traversed.

Referring to Claim 1, LeBlanc et al. do not show, teach, or suggest determining search window limitations for one or more sectors due to cell coverage area and due to mobile station dynamics.

LeBlanc et al. teach a location system for commercial wireless telecommunication infrastructures. The location system outputs requested locations of mobile stations based on various communication standards including code division multiple access (CDMA) (Abstract). LeBlanc et al. teach utilizing Internet communication between networks of location systems in order to process global mobile station location requests. The location system is designed to operate in various location signaling environments ranging from dense urban areas to isolated roadways (Abstract).

LeBlanc et al. teach that mobile stations utilize CDMA technology. However, the mobile stations do not determine search window limitations due to either cell coverage area or mobile station dynamics, as required by the claims. For example, the mobile stations do not determine search window limitations based on speeds that the mobile stations move towards or away from base stations, as taught by Applicant. LeBlanc et al. teach that a base station provides a defined search window size for each set of pilot channels to a mobile station (col. 21, line 26).

LeBlanc et al. teach that the base station is capable of extending the search window size in order to accommodate a larger set of potentially detectable base stations (col. 25, line 31). However, unlike Applicant, LeBlanc et al. do not also teach limiting the search window to a minimum size that is sufficient for desirable geo-location searches. LeBlanc et al. are silent with respect to limiting the size of the search windows. Therefore, the search windows taught by LeBlanc et al. remain at predefined sizes, which increases the required time to complete geo-location searches.

On page 4 of the Application, Applicant teaches that the objective of timing operations for CDMA communications is tracking the best signal(s) in the presence of fading and multipath. However, the primary objective for geo-location is identifying the current timing of the line-of-sight path. Therefore, Applicant teaches a distinct system of timing determination for geo-location. The sizes of search windows and offsets are strategically set by tracking earliest path / line-of-sight timing. The tracking of later arriving paths is based on mobile station dynamics, and the tracking of earlier arriving paths is based on cell size. Therefore, the speed at which geo-location searches are conducted is greatly improved.

Furthermore, LeBlanc et al. teach that a pilot arrival time is the time of occurrence of the earliest arriving usable multipath of the pilot (col. 35, line 17). However, a usable multipath includes communications signals that are demodulated for data processing purposes in general. Signals are not required to be demodulated for geo-location purposes because geo-location uses the timing of the pilot signal as opposed to included data. Therefore, unlike LeBlanc et al., Applicant teaches modifying the timing traditionally used by CDMA for the earliest required multipath in order to increase the speed of geo-location searches.

Claims 2-10 depend directly or indirectly from Claim 1 and are thus believed to be allowable over LeBlanc et al. for the same reasons.

Referring to Claim 21, LeBlanc et al. do not show, teach, or suggest a mobile station which determines search window limitations for one or more sectors due to the cell coverage area and due to mobile station dynamics, wherein the mobile station

searches for the earliest pilot phase offsets of the one or more sectors using the determined search windows.

The arguments made above with respect to Claim 1 are equally applicable to Claim 21. The mobile stations taught by LeBlanc et al. do not determine search window limitations due to either cell coverage area or mobile station dynamics. LeBlanc et al. teach that a base station provides a defined search window size for each set of pilot channels to a mobile station. LeBlanc et al. do not teach limiting the search windows to a minimum size that is sufficient for desirable geo-location searches. LeBlanc et al. are silent with respect to limiting the size of the search windows. Therefore, the search windows taught by LeBlanc et al. remain at predefined sizes, which increases the required time to complete geo-location searches.

Claims 22-30 depend directly or indirectly from Claim 21 and are thus believed to be allowable over LeBlanc et al. for the same reasons.

NEW CLAIMS

New Claims 52-54 are dependent upon Claim 1 and are believed to read on the elected invention and properly further limit Claim 1.

New Claims 55-57 are dependent upon Claim 21 and are believed to read on the elected invention and properly further limit Claim 21.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests

that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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By: _____

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